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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,125

04/12/2006

Stefan Henneck

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2741

26646 7590 05/21/2009

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EXAMINER

NGUYEN, VU ANH

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

05/21/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,125	<b>Applicant(s)</b> HENNECK ET AL.	
	<b>Examiner</b> Vu Nguyen	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action is in response to the Amendment filed 04/02/2009. Claims 17-36 are pending in this application.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 28-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. These claims recite weight ratios that involve those based on solutions. The weight ratios are recited as "depending on the concentration of the binder solution." Since a concentration of the binder solution is not defined, these ratios are ambiguous.

### ***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Rationales for the following rejections have been set forth in the Office action dated 12/10/2008.

7. Claims 17, 19-22, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osaka et al. (US 5,057,360) in view of Scheying et al. (WO 2001/044142), or Drumm et al. (US 2003/0098529), or Nonninger et al. (US 6,533,966).

*Notes: US 2004/0106508 is being used an English equivalent of WO 2001/044142.*

8. Claims 23 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osaka et al. (US 5,057,360) in view of Scheying et al. (WO 2001/044142), or Drumm et al. (US 2003/0098529), or Nonninger et al. (US 6,533,966) as applied to claim 17 above, and further in view of McAlea et al. (WO 95/30503).

9. Claims 18, 27, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osaka et al. (US 5,057,360) in view of Scheying et al. (WO 2001/044142), or Drumm et al. (US 2003/0098529), or Nonninger et al. (US 6,533,966) as applied to claim 17 above, and further in view of Reddy et al. (Journal of Materials Science 37 (2002), 929-934).

10. Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osaka et al. (US 5,057,360) in view of Scheying et al. (WO 2001/044142), or Drumm et al. (US 2003/0098529), or Nonninger et al. (US 6,533,966) as applied to claim 17 above, and further in view of C&EN (<http://pubs.acs.org/cen/topstory/8005/8005notw5.html>) and the 2001 Danish Environmental Protection Agency (DEPA) Report ([http://www2.mst.dk/common/Udgivramme/Frame.asp?http://www2.mst.dk/udgiv/Publications/2001/87-7944-407-5/html/default\\_eng.htm](http://www2.mst.dk/common/Udgivramme/Frame.asp?http://www2.mst.dk/udgiv/Publications/2001/87-7944-407-5/html/default_eng.htm)).

***Response to Arguments***

11. Applicant's arguments filed 04/02/2009 have been fully considered but they are not persuasive due to the following reasons.

12. The amendment to the claims 28-31 fails to overcome the rejection under 35 U.S.C. 112, second paragraph. The recited ratios are ambiguous as these are based on solutions whose concentrations are not defined.

13. The applicant alleges that the rejections of the claims over prior art are improper because "nowhere does Osaka et al. teach, or suggest, *"preparing a second dispersion by homogenizing the first dispersion with a binder solution consisting of a ceramic powder, one or more dispersing agents, an organic acid, at least one acrylatemethacrylate copolymer as the binder, and at least one softener"* and that none of the secondary references cure the deficiency. First, claim 17 does not recite *preparing a second dispersion by homogenizing the first dispersion with a **binder solution consisting of a ceramic powder**, one or more dispersing agents, an organic acid, at least one acrylatemethacrylate copolymer as the binder, and at least one softener*. Claim 17 recites a method which essentially includes (1) preparing a dispersion by mixing a ceramic powder with a dispersing solution and (2) mixing said dispersion with a binder/plasticizer solution. Such method, except for the organic acid in the dispersing solution, is taught by Osaka as discussed in the Office action. The deficiency of the organic acid is remedied by Scheying, or Drumm, or Nonninger. Note that the dispersing agent taught by Osaka in example 11, namely Ionet S-80, is in the form of a solution, that is, a dispersing agent solution.

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14. The applicant also questions whether the DEPA report is available as prior art since there is no indication of a publication date. The web address of the report indicates that it was posted on the web in 2001. On the web site, under Publication Description, the report was made public online on February 19, 2001. Note also that the publication year 2001 is also indicated on the front page of the document. In the Foreword section, it is indicated that the project for which the report was written was started in January 2000 and completed in December 2000.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Nguyen whose telephone number is (571)270-5454. The examiner can normally be reached on M-F 7:30-5:00 (Alternating Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Nguyen  
Examiner  
Art Unit 1796

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796